

Claims

1. Method for writing memory sectors in individually-deletable memory blocks (SB), comprising a number of memory sectors, whereby access to the physical sectors is achieved by means of an allocation table (ZT) for address conversion of a logical address (LA) into a physical block address (RBA) and a physical sector address (RSA), and whereby when a sector write command is to be carried out, which relates to an already written sector, the writing takes place to an alternative memory block (AB) by means of an altered address conversion, characterized in that the writing processes for sectors in the alternative memory block are carried out sequentially and the position of the relevant sector in the alternative block (AB) is stored in the sector table.
2. Method according to claim 1, characterized in that the altered address conversion is carried out by means of a data record with a physical block address (RBA) and a sector table in the internal storage of a memory controller.
3. Method according to claim 1, characterized in that the sector is organized as an index table (IT), wherein the physical sector address (RSA) serves as an index and the valid sector position in the alternative block (AB) is indicated at the corresponding position in the table.
4. Method according to claim 3, characterized in that a highest possible value assigned to a sector address (RSA) in the index table (IT) indicates that the corresponding sector remains unchanged in the original memory block (SB).
5. Method according to claim 1, characterized in that the sector table is organized as a search table (ST), each table entry of which indicates the physical sector address (RSA) with the corresponding valid sector position in the alternative block (AB).
6. Method according to claim 5, characterized in that the search table (ST), is sorted by physical sector addresses (RSA).

7. Method according to claim 1, characterized in that the position of the sector within the alternative block (AB) is also stored in the administrative part of the sector.

8. Method according to claim 7, characterized in that the sector table of a block is
5 reconstructed from the sector positions stored in the administrative part when the memory system is restarted.

9. Method according to claim 8, characterized in that when restarting, the sector position with the highest item number is registered in the sector table.

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10. Method according to claim 3, characterized in that a memory block contains 256 sectors and the corresponding index table (IT) has 32 byte.

11. Method according to claim 5, characterized in that a memory block contains 256
15 sectors and the corresponding search table (ST) has 32 byte.

12. Method according to claim 1, characterized in that, as soon as the sector table is filled, a new alternative block is searched for, to which the valid sectors from the original memory block, together with those from the previous alternative block, are then
20 copied.

13. Method according to claim 12, characterized in that the new alternative block is registered in the allocation table as the original memory block and the previous memory- and alternative blocks are cleared for deletion.

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14. Method according to claim 1, characterized in that in the allocation table a strategy indicator is carried along with each logical block address, indicating whether a sector mask or a sector table have last been used for the latter.

30 15. Method according to claim 14, characterized in that the strategy indicator is initialised with the remark "sector mask".

16. Method according to claim 15, characterized in that if the memory system is formatted as a FAT file system, the memory blocks are initialised with the remark "sector table".
- 5 17. Method according to claim 1, characterized in that if only a few sectors have been written to the alternative block system, and one of these blocks is to be rewritten, the administration of the alternative block is switched from sector mask to sector table.